



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

New York, February 1916.



Published to advance the Science of cold-blooded vertebrates

INDEX 1913, 1914, 1915

- Abramis crysoleucas, 1, 11, p. 28.
 Acantharchus pomotis, 10.
 Acanthodactylus boskianus, 8.
 Achirus lineatus, p. 50.
 Acipenser sturio, 2.
 Acris gryllus, 3, 11, p. 13, 21.
 Acris gryllus crepitans, 4, 7, p. 5, 38,
 52, 63.
 aeglinus, Melanogrammus, 15.
 aegyptia, Lampetra, p. 1.
 aesopus, Rana, 3, 5.
 aestivalis, Pomolobus, 13.
 aestivus, Cyclophis, 11, p. 6.
 Agama flavimaculata, 8.
 Agama pallida, 8.
 Agonostomus monticola, p. 50.
 albifrons, Sternarchus, 15.
 Albula vulpes, p. 50, 59.
 alcyon, Ceryle, p. 27.
 Alestes baremose, 8.
 Alfaro cultratum, 13.
 alleganiensis, Cryptobranchus, p. 38, 51.
 Alligator mississippiensis, 17.
 Alphestes lightfooti, p. 50.
 altus, Pseudopriacanthus, p. 44.
 Alutera schoepfii, 2, 13.
 Alytes obstetricans, p. 54.
 amabilis, Diadophis, 15.
 Ambloplites rupestris, 8, 13.
 Amblystoma jeffersonianum, 8, 13, 14.
 Amblystoma maculatum, p. 38.
 Amblystoma microstomum, 11.
 Amblystoma opacum, 8, 13.
 Amblystoma punctatum, 8, 13.
 Amblystoma tigrinum, 8, 12, p. 30.
 Amblystoma tigrinum californiense, p. 56.
 Ameiurus catus, 1, 5.
 Ameiurus natalis, 10.
 Ameiurus nebulosus, 1, 5, p. 51.
 americana, Morone, 2, 5, p. 42.
 americanus, Bufo, 2, 4, 11, 16, p. 5, 38,
 51, 53, 55, 63.
 americanus, Esox, 10.
 americanus, Menticirrhus, 9.
 amoenus, Carphophis, 17, p. 6.
 amoenus, Notropis, 8, 13.
 Ampithoe, 11.
 ampullaceum, Distomum, 6.
 analostanus, Notropis, 1.
 Ancistrodon contortrix, 2, 10, 16, p. 6,
 37, 63.
 Anguilla anguilla, 8.
 anguilla, Anguilla, 8.
 Anguilla chrysypa, 1, 2, 5, 13, p. 50.
 Anisotremus surinamensis, p. 50.
 annularis, Tarentola, 8.
 anomalum, Campostoma, p. 51.
 apodus, Neomaenis, p. 50.
 arcuatus, Pomacanthus, p. 24.
 arenatus, Priacanthus, p. 50.
 areolata, Rana, 11.
 argyrophanus, Stolephorus, 3.
 Athlennes, p. 13.
 atlanticus, Tarpon, p. 59.
 atromaculatus, Semotilus, 13, p. 51.
 atronatus, Rhinichthys, 13, p. 51.
 attenuatus, Batrachoseps, p. 62.
 auratus, Carassius, 8, p. 28.
 auritus, Lepomis, 1, 5, 11, 13.
 auritus, Siluranodon, 8.
 auropunctatus, Cryptotomus, 14.
 Autodax lugubris, p. 62.
 Awaous, taiaica, p. 50.
 bahianus, Hepatus, p. 50.
 baileyi, Crotaphytes, 1, 5.
 Bairdiella chrysura, 2, 13, p. 44.
 Bairdiella ronchus, p. 50.
 Bajad, Porcus, 8.
 balaenops, Sternarchella, 15.
 Balistidae, 3.
 Barbour, T. 10.
 Barbus bynni, 8.
 baremose, Alestes, 8.
 barracuda, Sphyræna, 6.
 bartholomæi, Caranx, 14.
 Batrachoseps attenuatus, p. 62.
 beryllina cerea, Menidia, 2.
 berrylinus, Cryptotomus, 14.
 bifrenatus, Notropis, 11.
 bilinearis, Merluccius, 13, p. 43, 45.
 bilineatus, Spelerpes, 2, 4, 13, 16, p.
 15, 29, 38, 51, 54, 63.
 bipinnulatus, Elagatis, 6.
 bi-seriatus, Sceloporus, p. 10.
 Blepharis crinitus, p. 50.
 Boleosoma nigrum, p. 51.
 Boleosoma nigrum olmstedii, 1, 5, 13.
 Bombinator pachypus, p. 54.
 bonaparti, Sternarchus, 15.
 borealis, Sphyræna, 3, p. 44.
 Boyle, H. S. 7, 9.
 Brachydenterus corvinaeformis, p. 50.

- brevirostris, *Hypopomus*, 15.
 Brevoortia tyrannus, 2, 3, 13, p. 21, 41, 43.
 brownii, *Stolephorus*, p. 50.
 Bryant, H. C. p. 48.
 bucanella, *Neomaenis*, p. 50.
 Bufo americanus, 2, 4, 11, 16, p. 5, 38, 51, 53, 55, 63.
 Bufo fowleri, 3, p. 53, 54.
 Bufo lentiginosus, 3, 9.
 Bufo quercicus, 3, 9.
 Bufo viridis, p. 54.
 bullaris, *Semotilus*, 1, 13.
 butleri, *Thamnophis*, 15.
 bynni, *Barbus*, 8.
 Calamus calamus, p. 50.
 calamus, *Calamus*, p. 50.
 callarias, *Gadus*, 13.
 Cambarus, p. 28.
 Campostoma anomalum, p. 51.
 canadus, *Rachycentron*, 2.
 canis, *Mustelus*, p. 43.
 Caranx bartholomaei, 14.
 Caranx crysos, 2, 13, p. 41.
 Caranx hippos, p. 50.
 Caranx latus, 14, p. 50.
 Caranx pisquetus, p. 50.
 carapo, *Gymnotus*, 15.
 Carassius auratus, 8, p. 28.
 Carcharinus milberti, 2, 13.
 Carcharias littoralis, 13.
 Caretta caretta, 2, 3, 4.
 caretta, *Thalassochelys*, 2, 3, 4.
 carolina, *Terrapene*, 3, 4, 11, 12, 16, p. 7, 36, 40, 63.
 carolinense, *Engystoma*, 3, 9.
 carolinus, *Prionotus*, 1, 13.
 carolinus, *Trachinotus*, 2, 13, p. 44.
 Carphophis amoenus, 17, p. 6.
 carpio, *Cyprinus*, 1, 5.
 cataractae, *Rhinichthys*, 11, 13.
 catenifer, *Pituophis*, 15, p. 10.
 catesbiana, *Rana*, 3, 4, 5, 11, 11, 16, 16, p. 5, 39, 47, 51, 63.
 Catostomidae, p. 28.
 Catostomus, 6.
 Catostomus commersonii, 1, 51, 11, p. 51.
 catus, *Ameiurus*, 1, 5.
 Caulolatilus chrysops, p. 50.
 cavalla, *Scomberomorus*, p. 50.
 Centrarchidae, p. 28.
 Centropomus cuvieri, p. 50.
 Centropomus ensiferus, p. 50.
 Centropomus parallelus, p. 50.
 Centropomus striatus, 2, 13, p. 42.
 cepedianum, *Dorosoma*, 8.
 Cephalopholis fulvus, p. 50.
 Cephalopholis fulvus onatalibi, p. 50.
 Cerastes cerastes, 8.
 cerastes, *Cerastes*, 8.
 Ceryle alcyon, p. 27.
 Cetacea, p. 20.
 Cetorhinus maximus, p. 21, 25.
 Chaenobryttus gulosus, 7, 9.
 Chaetodipterus faber, p. 50.
 Chaetodon ocellatus, p. 44.
 Characinidae, p. 58.
 Charina, p. 64.
 Chelydra emarginata, 1, 6.
 Chelydra lacertina, 1, 6.
 Chelydra serpentina, 1, 2, 4, 6, 11, 12, 16, p. 6, 40, 63.
 Chilomycterus schoepfi, 2, p. 42, 44.
 Chloretone, p. 63.
 Chorophilus nigrinus, 3, 11, p. 22.
 Chorophilus occidentalis, 3, p. 22.
 Chorophilus ocellaris, 3, p. 23.
 chrisypa, *Anguilla*, 1, 2, 5, 13, p. 50.
 Chrysemys picta, 4, 11, 12, 16, p. 7, 40.
 chrysops, *Caulolatilus*, p. 50.
 chrysops, *Stenotomus*, 13.
 chrysura, *Bairdiella*, 2, 13, p. 44.
 chrysurus, *Ocyurus*, 17.
 chuss, *Urophycis*, 1, 3, 13, p. 2, 43.
 cinerea, *Hyla*, 3, p. 4, 55.
 cinereus erythronotus *Plethodon*, 2, 4, 10, 13, 16, p. 38, 51.
 Citharichthys spilopterus, p. 50.
 clamitans, *Rana*, 2, 3, 5, 11, 16, 16, p. 5, 13, 39, 47, 51, 53, 53, 55, 63.
 Clarias lazera, 8.
 Clemmys guttata, 4, 12, 16, p. 40.
 Clemmys insculpta, 4, 12, 16.
 Clemmys marmorata, p. 11.
 Clemmys mühlenbergii, 4, 16.
 Clupea harengus, p. 41.
 clupeoides, *Stolephorus*, p. 50.
 Cnemidophorus sexlineatus, p. 6.
 Coles, R. J. 4, 5, 17, p. 49.
 Colias, p. 9.
 colias, *Scomber*, 11.
 collaris, *Crotaphytes*, 1.
 Coluber diadema, 8.
 Coluber florulentis, 8.
 commersonii, *Catostomus*, 1, 5, 11, p. 51.
 confluentus, *Crotalus*, 12.
 conger, *Leptocephalus*, p. 43.
 constrictor, *Zamenis*, 4, 11, 16, 17, p. 6, 40, 45, 63.
 constrictor flaviventris, *Zamenis*, 15.
 contortrix, *Ambystodon*, 2, 10, 16, p. 6, 37, 63.
 cornutus, *Notropis*, 1, 13.
 coroides, *Umbriana*, p. 50.
 coryinaeformis, *Brachydeuterus*, p. 50.
 Corvula subaequalis, p. 50.
 Coryphaena hippurus, 6.
 Cottus gracilis, p. 51.
 coubie, *Labeo*, 8.
 Crandall, L. S. 13, 14.
 crinitus, *Blepharis*, p. 50.
 cromis, *Pogonias*, p. 44.
 Crotalus confluentus, 11.
 Crotalus horridus, 2, 10, 17, p. 6, 19, 63.
 Crotalus oregonus, 14, 15, p. 48.
 Crotaphytes baileyi, 1, 5, 12.
 Crotaphytes collaris, 1.
 Crotaphytes wislizenii, 5, 12.
 crumenophthalmus, *Trachurus*, 3, p. 50.
 Cryptobranchus alleghaniensis, p. 38, 51.
 Cryptotomus aurospunctatus, 14.
 Cryptotomus beryllinus, 14.
 Cryptotomus dentiens, 14.
 Cryptotomus retractus, 14.
 Cryptotomus roseus, 14.
 Cryptotomus, ustus, 14.
 crysoleucas, *Abramis*, 1, 11, p. 28.
 crysos, *Caranx*, 2, 13, p. 41.
 Ctenops vittatus, 4.
 cultratum, *Alfaro*, 13.
 Culver, D. E., p. 37.
 curema, *Mugil*, 3, p. 50.
 cuvieri, *Centropomus*, p. 50.
 evanella, *Lepomis*, 7.
 Cyclophis aestivus, 11, p. 6.
 Cyclopterus lumpus, 13, 13.
 Cynoscion nebulosus, 2.
 Cynoscion regalis, 2, 13.
 Cyprinidae, p. 20, 58.
 Cyprinodon variegatus, 2.
 Cyprinus carpio, 1, 5.
 Dasyatis say, 2.
 Davis, W. T., p. 2.
 Deckert, R. F. 3, 5, 9, 13, p. 5, 24, 54.
 dekayi, *Storeria*, 14, 16, 17, p. 6.

- Delphinidae, p. 21.
 dentatus, Paralichthys, 1, 2, 13.
 dentex, Odontoscion, p. 50.
 dentiens, Cryptotomus, 14.
 Desmognathus fusca, 2, 4, 13, 16, p. 5, 38, 51, 63.
 Diadema, p. 33.
 diadema, Coluber, 8.
 Diadophis amabilis, 15.
 Diadophis punctatus, 17, p. 6, 61, 63.
 diaphanus, Fundulus, 2, 13.
 Diemictylus torosus, p. 62.
 Diemictylus viridescens, 2, 10, 13, 14, p. 5, 51.
 Diemictylus viridescens miniatus, 13.
 Diodon histrix, p. 11.
 Distomum ampullaceum, 6.
 Ditmars, R. L., 10.
 Dixonina nemoptera, p. 50.
 doliatus, Ophibolus, p. 40.
 doliatus triangulus, Ophibolus, 16, 17, p. 52, 63.
 dolomieu, Micropterus, 1, 5, 13.
 dominicensis, Synodus, p. 50.
 dormitator, Philypnus, p. 50.
 Dorn, R., 4.
 Dorosoma cepedianum, 8.
 Doryrhamphus lineatus, p. 50.
 Dunn, E. R., 16, p. 7, 9, 30, 37, 63.
 duplicata, Natica, 3.
 Eastman, C. R. p. 12.
 Echeneidae, 3.
 Echeneis guaicano, p. 11.
 Echeneis naucrates, 13, p. 11, 50.
 erinacea, Raja, 13.
 eglanteria, Raja, 2.
 Eigenmannia troscheli, 15.
 Eigenmannia virescens, 15.
 eiseni, Tantilla, 15.
 Elagatis bipinnulatus, 6.
 Elaphe guttatus, p. 6.
 Elaphe obsoletus, p. 6, 39, 63.
 Elasmopus, 11.
 electricus, Electrophorus, 15.
 electricus, Malapterurus, p. 58.
 Electrophorus electricus, 15.
 elegans, Pseudemys, p. 15.
 elegans Steatogenes 15.
 Eleotris pisonis, p. 50.
 Elops saurus, p. 50, 59.
 emarginata, chelydra, 1.
 Engelhardt, G. P. 7, 8, 17.
 Engystoma carolinense, 3, 9.
 Enneacanthus obesus, 10.
 ensiferus, Centropomus, p. 50.
 Epinephelus flavolimbatus, p. 50.
 Epinephelus maculosus, p. 50.
 Erismyzon succetta oblongus, 11, p. 51.
 Eryx jaculus, 8.
 Eryx thebaicus, 8.
 esculenta, Rana, p. 54.
 Esox, p. 27.
 Esox americanus, 10.
 Esox lucius, p. 35.
 Esox reticulatus, 5.
 Etheostoma flabellare, p. 51.
 Eucinostomus gula, p. 50.
 Eucinostomus harengulus, p. 50.
 Eumeces fasciatus, p. 6.
 Eupomacentrus fuscus, p. 50.
 Eupomacentrus otophorus, p. 50.
 Eupomotis gibbosus, 1, 5, 11, 13, 13.
 Eutamias merriami, 14.
 Eutropius niloticus, 8.
 Eutyphus faba, 6.
 Evermann, B. W., 14, p. 8, 18.
 evittata, Hyla, p. 38, 55.
 Exocoetidae, p. 12.
 faba, Eutyphus, 6.
 faber, Chaetodipterus, p. 50.
 falcatus, Trachinotus, 13, p. 50.
 fario, Salmo, 5.
 fasciatus, Eumeces, p. 6.
 fasciatus, Natrix, 11.
 femoralis, Hyla, p. 3.
 ferruginea, Limanda, 1.
 Fish Poison, p. 57.
 flabellare, Etheostoma, p. 51.
 flagelliformis frenatus, Zamenis, 15.
 flavescens, Perca, 5, p. 27, 35, 36.
 flavimaculata, Agama, 8.
 flavolimbatus, Epinephelus, p. 50.
 florulentis, Coluber, 8.
 foetens, Synodus, 13, p. 44.
 fontinalis, Salvelinus, p. 20, 51.
 forskalii, Hydrocyon, 8.
 Fowler, H. W., 1, 1, 2, 3, 5, 6, 8, 10, 11, 13, 14, 15, 17, p. 16, 40, 50.
 fowleri, Bufo, 3, p. 53, 54.
 Franklin, D., 1, 5, 11, 12, p. 31, 36.
 freminivillii, Myliobatis, 2.
 fulvus, Cephalopholis, p. 50.
 fulvus onatalibi, Cephalopholis, p. 50.
 Fundulus, p. 28.
 Fundulus diaphanus, 2, 13.
 Fundulus heteroclitus macrolepidotus, 2, 5.
 Fundulus luciae, 2.
 Fundulus majalis, 2, 13.
 funebris, Gymnothorax, p. 50.
 fusca, Desmognathus, 2, 4, 13, 16, p. 5, 38, 51, 63.
 fuscum, Siphostoma, p. 44.
 fuscus, Eupomacentrus, p. 50.
 Gadus callarias, 13.
 Gaige, H. T., 11, 14.
 Galeocerdo tigrinus, p. 43.
 Gambusia holbrocki, 10.
 garnotii, Hemidactylus, 6.
 Gempylus serpens, p. 50.
 Gerres olithostomus, p. 50.
 Gerres plumieri, p. 50.
 Gerres rhombeus, p. 50.
 Gerrhonotus scincicauda, p. 10.
 getulus, Ophibolus, 17, p. 6.
 getulus boylii, Ophibolus, 15.
 gibbosus, Eupomotis, 1, 5, 7, 11, 11, 13.
 Gill, T. N., 6.
 gladius Xiphias, p. 12, 41.
 glaucus, Trachinotus, p. 50.
 glutinosus, Plethodon, 2, 13, p. 51, 63.
 gracilis, Cottus, p. 51.
 grahamiae, Salvadoria, 15.
 gratiosa, Hyla, 3, p. 4.
 Gregory, W. K., p. 60.
 griseus, Neomacris, 17.
 griseus, Varanus, 8.
 Gronberger, S. M., p. 55.
 grylio, Rana, 3, 5.
 gryllus, Acris, 3, 11, p. 13, 21.
 gryllus crepitans, Acris, 4, 7, p. 5, 38, 52, 63.
 guachancho, Sphvaena, p. 50.
 guaicano, Echeneis, p. 11.
 gula, Eucinostomus, p. 50.
 gulosus, Chaenobryttus, 7, 10.
 guttata, Clemmys, 4, 12, 16, p. 40.
 guttatus, Elaphe, p. 6.
 Gymnothorax funebris, p. 50.
 Gymnothorax ocellatus, p. 50.
 Gymnotus carapo, 15.
 Gyrinophilus porphyriticus, p. 14, 51.
 gvrinus, Schilbeodes, p. 51.
 Haemulon plumieri, p. 50.
 Haemulon sciurus, p. 33.

- haje, Naja, 8.
 Halter, C. R., p. 61.
 hammondi, Thamnophis, 15.
 harengulus, Eucinostomus, p. 50.
 harengus, Clupea, p. 41.
 Harper, F., p. 43.
 hasselquistii, Ptyodactylus, 8.
 Haupt, H., Jr., p. 19, 46.
 Heloderma suspectum, 7.
 Hemidactylum scutatum, 9, 13.
 Hemidactylus garnotii, 6.
 Hepatus bahianus, p. 50.
 heteroclitus macrolepidotus, Fundulus, 2, 5.
 Heterodon platyrhinus, 4, 11, 17, p. 6, 37, 39.
 Hippocampus, p. 12.
 Hippocampus hudsonius, 1.
 hippos, Caranx, p. 50.
 hippurus, Coryphaena, 6.
 Hirundinella 6.
 Hirundinella clavata, 6.
 hispidus, Stephanolepis, 13.
 histrio, Pterophryne, p. 49.
 histrix, Diodon, p. 11.
 holbrookii, Gambusia, 10.
 holbrookii, Scaphiopus, p. 17, 52.
 Homo sapiens, 2, 4, p. 57.
 hudsonius, Hippocampus, 1.
 hudsonius amarus, Notropis, 1, 5.
 humeralis, Sardinella, p. 50.
 Hussakof, L., 11, p. 27.
 Hybopsis kentuckiensis, p. 51.
 Hydrocyon forskallii, 8.
 Hyla cinerea, 3, p. 4, 55.
 horridus, Crotalus, 2, 10, 17, p. 6, 19, 63.
 Hyla evittata, p. 38, 55.
 Hyla femoralis, 3, p. 3.
 Hyla gratiosa, 3, p. 4.
 Hyla pickeringii, 1, 2, 3, 3, 4, 4, 14, 16, p. 3, 22, 38, 51.
 Hyla squirella, 3, p. 3.
 Hyla versicolor, 4, p. 5, 39, 53, 55, 63.
 Hypopomus brevirostris, 15.
 Hyporhamphus roberti, p. 44.
 Hypsiglena ochrorhyncha, 15.
 Ianthina, 6.
 Idothea metallica, 6.
 Imperator, Tetraodon, p. 59.
 incisor, Lepomis, 5.
 insculpta, Clemmys, 4, 12, 16.
 Iridio poeyi, p. 50.
 Istiophorus, p. 12.
 jaculus, Eryx, 8.
 jeffersonianum, Amblystoma, 8, 13, 14.
 jocu, Neomaenis, p. 50.
 joturus pichardi, p. 50.
 Keim, T. D., 2, p. 52.
 Kendall, W. C., 12, 13.
 Kentuckiensis, Hybopsis, p. 51.
 Kinosternon pensylvanicum, 4, 11, p. 6, 40.
 Labeo coubie, 8.
 Labridae, p. 20.
 Labrisomus nuchipinnis, p. 50.
 lacertina, Chelydra, 1.
 lachinura roseofusca, 15.
 Lactophrys tricornis, p. 50.
 Lactophrys triquetter, p. 50.
 laevis, Raja, 13.
 Lamnidae, p. 20.
 Lampetra aepytera, p. 1.
 Lampetra wilderi, 1.
 Lang, H., p. 59.
 laterale, Zamenis, 15.
 Lates niloticus, 8.
 Latham, R., 17, p. 61.
 latus, Caranx, 14, p. 50.
 lazera, Clarias, 8.
 leberis, Regina, 16, p. 6.
 lecontei, Rhinoceros, p. 32.
 Leiostomus xanthurus, 2, p. 44.
 lentiginosus, Bufo, 3, 9.
 Lepidodactylus lugubris, 6.
 Lepisosteus platostomus, 11.
 Lepisosteus tristoechus, 11.
 Lepomis suritus, 1, 5, 11, 13.
 Lepomis cyanellus, 7.
 Lepomis incisor, 5.
 Leptocephalus conger, p. 43.
 lepturus, Trichurus, 2, p. 50.
 lightfooti, Alphestes, p. 50.
 Limanda ferruginea, 1.
 lineatus, Achirus, p. 50.
 lineatus, Doryhamphus, p. 50.
 Liopeltis vernalis, 17, p. 52.
 Liparis liparis, p. 2.
 liparis, Liparis, p. 2.
 littoralis, Carcharias, 13.
 Lobotes surinamensis, 1.
 longicauda, Spelerpes, 2, p. 63.
 Lophius piscatorius, 2, p. 60.
 Lophopsetta maculata, 1, 2, 13, p. 45.
 luciae, Fundulus, 2.
 lucius, Esox, p. 35.
 lugubris, Autodax, p. 62.
 lugubris, Lepidodactylus, 6.
 lumpus, Cyclopterus, 13, 13.
 maclura, Pteroplatea, 2.
 macrostoma, Sternarchorhamphus, 15.
 macrurus, Sternopygus, 15.
 maculata, Lophopsetta, 1, 2, 13, p. 45.
 maculatum, Amblystoma, p. 38.
 maculatus, Scomberomorus, 2.
 maculatus, Spheroides, 2, 13, p. 42.
 maculosus, Epinephelus, p. 50.
 mahogoni, Neomaenis, p. 50.
 majalis, Fundulus, 2, 13.
 Malapterurus electricus, p. 58.
 marginata, Rissola, p. 45.
 marinus, Tylosurus, 2.
 marmorata, Clemmys, p. 11.
 maximus, Cetorhinus, p. 21, 25.
 Mead, C. W., p. 36.
 megalops, Thamnophis, 12.
 Melanogrammus aeglefinus, 15.
 menidia, p. 28.
 Menidia beryllina cerea, 2.
 Menidia menidia notata, 2, 11, 13.
 menidia notata, Menidia, 2, 11, 13.
 Menticirrhus americanus, 9.
 Menticirrhus saxatilis, 2, 9, 13, p. 44.
 Merluccius bilinearis, 13, p. 43, 45.
 merriami, Eutamias, 14.
 mesogaster Parexocoetus, p. 50.
 metallica, Idothea, 6.
 Micropogon undulatus, 2, 13.
 Micropterus dolomieu, 1, 5, 13.
 Micropterus salmoides, 1, 5, p. 42.
 microstomum, Amblystoma, 11.
 milberti, Carcharhinus, 2, 13.
 miliarius, Sistrurus, p. 60.
 Miller, W. De W., 1.
 mississippiensis, Alligator, 17.
 mitchilli, Stolephorus, 2, p. 44.
 Mola mola, p. 17, 43.
 mola, Mola, p. 17, 43.
 monticola, Agonostomus, p. 50.
 Mormyridae, p. 58.
 Morone americana, 2, 5, p. 42.
 Mugil curema, 3, p. 50.
 mühlenbergii, Clemmys, 4, 16.
 multilatus, Peropus, 6.
 Muraenesox savanna, p. 50.
 Murphy, R. C., 2, 3, 6, 17, p. 43.
 Mustelus canis, p. 43.

- Myliobatis freminvillii, 2.
 Myoxocephalus octodecimspinosus, p. 44.
 Mystacoceti, p. 21.
 Naja haje, 8.
 natalis, Ameiurus, 10.
 Natica duplicata, 3.
 Natrix fasciata, 11.
 Natrix septemvittata, p. 37, 63.
 Natrix sipedon, 2, 4, 16, 17, p. 6, 15, 37, 39, 52, 63.
 naucrates, Echeineis, 13, p. 11, 50.
 nebulosus, Ameiurus, 1, 5, p. 51.
 nebulosus, Cynascion, 2.
 Nelson, T. C., p. 14.
 nemoptera, Dixonina, p. 50.
 Neomaenis apodus, p. 50.
 Neomaenis bucanella, p. 50.
 Neomaenis griseus, 17.
 Neomaenis jocu, p. 50.
 Neomaenis mahogoni, p. 50.
 Neomaenis synagris, p. 50.
 Neomaenis vivanus, p. 50.
 Nichols, J. T., 1, 3, 3, 12, 17, p. 13, 21, 24, 28, 45, 60.
 nigratus, Chorophilus, 3, 11, p. 22.
 nigrum, Boleosoma, p. 51.
 nigrum olmstedii, Boleosoma, 1, 5, 13.
 nilotica, Tilapia, 8.
 niloticus, Eutropius, 8.
 niloticus, Lates, 8.
 niloticus, Varanus, 8.
 notatus, Pimephales, p. 51.
 Notropis amoenus, 5, 13.
 Notropis analostanus, 1.
 Notropis bifrenatus, 11.
 Notropis cornutus, 1, 13.
 Notropis hudsonius amarus, 1, 5.
 nuchipinnis, Labrisomus, p. 50.
 obesus, Enneacanthus, 10.
 oblongus, Paralichthys, 1.
 obsoletus, Elaphe, p. 6, 39, 63.
 obstetricans, Alytes, p. 54.
 ocellatus, Gymnothorax, p. 50.
 occidentalis, Chorophilus, 3, p. 22.
 occipitomaculata, Storeria, 17, p. 6, 7.
 ocellata, Raja, 3, 13, p. 43.
 ocellatus, Chaetodon, p. 44.
 ochroryncha, Hypsiglena, 15.
 octodecimspinosus, Myoxocephalus, p. 44.
 ocularis, Chorophilus, 3, p. 23.
 Ocyurus chrysurus, 17.
 Odontoscion dentex, p. 50.
 odoratus, Sternotherus, 4, 12, 16, p. 52.
 oglinum, Opisthonema, 2, p. 50.
 olisthostomus, Gerres, p. 50.
 onitis, Tautoga, 3.
 opacum, Amblystoma, 8, 13.
 operculata, Siren, p. 30.
 Ophibolus dollatus, p. 40.
 Ophibolus dollatus triangulus, 16, 17, 52, 63.
 Ophibolus getulus, 17, p. 6.
 Ophibolus getulus boylii, 15.
 Ophibolus rhombomaculatus, p. 6.
 Ophibolus zonatus, 15.
 Ophiosaurus ventralis, 11.
 Opisthonema oglinum, 2, p. 50.
 Opsanus tau, p. 60.
 oregonensis, Plethodon, p. 62.
 oregonus, Crotalus, 14, 15, p. 48.
 ornatus, Uromastix, 8.
 Orthopristis chrysopterus, 2, 13, p. 44.
 otophorus, Eupomacentrus, p. 50.
 Overton, F., p. 3, 4, p. 17, 53.
 pachypus, Bombinator, p. 54.
 Pagurus pollicaris, 3.
 pallida, Agama, 8.
 palustris, Rana, 2, 4, 16, p. 6, 13, 39, 51, 55, 63.
 Paralichthys dentatus, 1, 2, 13.
 Paralichthys oblongus, 1.
 paralicus, Centropomus, p. 50.
 Parexocoetus mesogaster, p. 50.
 parietalis, Thammodon, 15, p. 10.
 paru, Pomacanthus, p. 24.
 Pecten, p. 2.
 pectinatus, Pristis, 2.
 pensylvanicum, Kinosternon, 4, 11, p. 6, 40.
 Perca flavescens, 5, p. 27, 35, 36.
 Peropus multilatus, 6.
 Philypnus dormitator, p. 50.
 Phillips, R. J., 1, 9.
 Phrynosoma, 12, p. 10.
 pichardi, Joturus, p. 50.
 pickeringii, Hyla, 1, 2, 3, 3, 4, 4, 14, 16, p. 3, 22, 38, 51.
 picta, Chrysemis, 4, 11, 12, 16, p. 7, 40.
 picudilla, Sphyraena, p. 50.
 Pieris, p. 9.
 Pimephales notatus, p. 51.
 pipiens, Rana, 2, 3, 4, 5, 11, p. 13, 39, 53, 55.
 piscatorius, Lophius, 2, p. 60.
 pisonis, Eleotris, p. 50.
 pisquetus, Caranx, p. 50.
 Pituophis catenifer, 15, p. 10.
 Pituophis sayi, 11, 12.
 platostomus, Lepisosteus, 11.
 platyrhinus, Heterodon, 4, 11, 17, p. 6, 37, 39.
 Plethodon cinereus erythronotus, 2, 4, 10, 13, 16, p. 38, 51.
 Plethodon glutinosus, 2, 13, p. 51, 63.
 Plethodon oregonensis, p. 62.
 plumieri, Gerres, p. 50.
 plumieri, Haemulon, p. 50.
 plumieri, Scorpaena, p. 50.
 Poeciliidae, p. 20.
 poeyi, Iridio, p. 50.
 Pogonias cromis, p. 44.
 Pollachius virens, p. 45.
 pollicaris, Pagurus, 3.
 Polydactylus virginicus, p. 50.
 Polyodon spathula, 4.
 Pomacanthus arcuatus, p. 24.
 Pomacanthus paru, p. 24.
 Pomadasis ramosus, p. 50.
 Pomatomus saltatrix, 2, 13, p. 44.
 Pomolobus aestivalis, 13.
 Pomolobus pseudoharengus, 3, 5, p. 43.
 pomotis, Acantharchus, 10.
 Pomoxis sparoides, 5, 11.
 Pope, P. H., 16, p. 15.
 Porcus, bajad, 8.
 Poronotus triacanthus, 2, 13, p. 41.
 porphyriticus, Gyrynophilus, p. 14, 51.
 Priacanthus arenatus, p. 50.
 Prionotus carolinus, 1, 13.
 Prionotus strigatus, 2, 13, p. 45.
 Pristis pectinatus, 2.
 Psammophis shokari, 8.
 Psammophis sibilans, 8.
 Pseudacris triseriatus, 2, 10.
 Pseudemys elegans, p. 15.
 Pseudemys rubriventris, p. 6, 40, 63.
 pseudoharengus, Pomolobus, 3, 5, p. 43.
 pseudopriacanthus altus, p. 44.
 Pterophryne histrio, p. 49.
 Pteronotla maclura, 2.
 Ptyodactylus hasselquistii, 8.
 punctatum, Amblystoma, 8, 13.
 punctatus, Diadophis, 17, p. 6, 61, 63.
 quercicus, Bufo, 3, 9.
 Rachycentron canadus, 2.

- Radcliffe, L., 7, 14.
 Raja eglanteria, 2.
 Raja erinacea, 13.
 Raja laevis, 13.
 Raja ocellata, 3, 13, p. 43.
 ramosus, Pomadasis, p. 50.
 Rana aescopus, 3, 5.
 Rana aerolata, 11.
 Rana catesbiana, 3, 4, 5, 11, 11, 16, 16, p. 5, 39, 47, 51, 63.
 Rana clamitans, 2, 3, 5, 11, 16, 16, p. 5, 13, 39, 47, 51, 53, 53, 55, 63.
 Rana esculenta, p. 54.
 Rana grylio, 3, 5.
 Rana palustris, 2, 4, 16, p. 6, 13, 39, 51, 55, 63.
 Rana pipiens, 2, 3, 4, 5, 11, p. 13, 39, 53, 55.
 Rana septentrionalis, 16, p. 46.
 Rana sphenocephala, 3, 5.
 Rana sylvatica, 2, 4, 11, 16, p. 39, 51.
 Rana temporaria, p. 54.
 regalis, Cynoscion, 2, 13.
 regalis, Scomberomorus, p. 50.
 Regina leberis, 16, p. 6.
 regius, Urophycis, 13, p. 45.
 Reighard, J., p. 35.
 reticulatus, Esox, 5.
 retractus, Cryptotomus, 14.
 Rhampichthys rostratus, 15.
 Rhinichthys atronaseus, 13, p. 51.
 Rhinichthys cataractae, 11, 13.
 Rhinocilus lecontei, p. 32.
 Rhinodon typicus, p. 21.
 rhombeus, Gerres, p. 50.
 rhombomaculatus, Ophibolus, p. 6.
 Rissola marginata, p. 45.
 roberti, Hyporhamphus, p. 44.
 ronchus, Bairdiella, p. 50.
 roseofusca, Lachinura, 15.
 roseus, Cryptotomus, 14.
 rostratus, Rhampichthys, 15.
 ruber, Spelerpes, 10, 13, 16, p. 28, 38, 63.
 rubriventris, Pseudemys, p. 6, 40, 63.
 rupestris, Ambloplites, 5, 13.
 Ruthling, P., D., R., 15, p. 11, 32, 62.
 Ruthven, A., G., 15.
 salar, Salmo, p. 20.
 Salmo fario, 5.
 Salmo salar, p. 20.
 salmoides, Micropterus, 1, 5, p. 42.
 saltatrix, Pomatomus, 2, 13, p. 44.
 Salvadora grahamiae, 15.
 Salvelinus fontinalis, p. 20, 51.
 sapiens, Homo, 2, 4, p. 57.
 Sarda sarda, 13.
 sarda Sarda, 13.
 Sardinella humeralis, p. 50.
 sauritus, Thamnophis, 16, 17, p. 40, 63.
 saurus, Elops, p. 50, 59.
 savanna, Muraenesox, p. 50.
 saxatilis, Menticirrhus, 2, 9, 13, p. 44.
 say, Dasyatis, 2.
 sayi, Pituophis, 11, 12.
 Scaphiopus holbrooki, p. 17, 52.
 Scaridae, p. 10.
 Sceloporus bi-seriatus, p. 10.
 Sceloporus undulatus, 4, 16, p. 6, 9, 40, 63.
 schall, Synodontis, 8.
 Schilbeodes gyrinus, p. 51.
 schoepfii, Alutera, 2, 13.
 schoepfii, Chilomycterus, 2, p. 42, 44.
 schottii, Sternarchella, 15.
 scincicauda, Gerrhonotus, p. 10.
 Scincus scincus, 8.
 scincus, Scincus, 8.
 sciurus, Haemulon, p. 33.
 Scomber, p. 21.
 Scomber colias, 11.
 Scomber scombrus, 13, p. 12, 41.
 Scomberomorus cavalla, p. 50.
 Scomberomorus maculatus, 2.
 Scomberomorus regalis, p. 50.
 Scombridae, p. 20.
 scombrus, Scomber, 13, p. 12, 41.
 Scorpaena plumieri, p. 50.
 scutatum, Hemidactylum, 9, 13.
 Selene vomer, p. 50.
 Semotilus atromaculatus, 13, p. 51.
 Semotilus bullaris, 1, 13.
 septemvittata, Natrix, p. 37, 63.
 septentrionalis, Rana, 16, p. 46.
 serpens, Gempylus, p. 50.
 serpentina, Chelydra, 1, 2, 4, 11, 12, 16, p. 6, 40, 63.
 serpentina, Testudo, 1.
 setipinnis, Vomer, p. 44, 50.
 sexlineatus, Cnemidophorus, p. 6.
 shokari, Psammophis, 8.
 sibilans, Psammophis, 8.
 silenus, Zaprora, 12.
 Siluranodon auritus, 8.
 Siluridae, p. 58.
 sipedon, Natrix, 2, 4, 16, 17, p. 6, 15, 37, 39, 52, 63.
 Siphostoma, p. 12.
 Siphostoma fuscum, 2, 13, p. 44.
 Siren operculata, p. 30.
 sirtalis, Thamnophis, 2, 4, 11, 16, 17, p. 6, 8, 15, 40, 51, 60.
 Sistrurus miliarius, p. 60.
 Skinner, A., 12.
 Snyder, J. O., p. 64.
 sparoides, Pomoxis, 5, 11.
 spatula, Polyodon, 4.
 Spelerpes bilineatus, 2, 4, 13, 16, p. 15, 29, 38, 51, 54, 63.
 Spelerpes longicauda, 2, p. 63.
 Spelerpes ruber, 10, 13, 16, p. 28, 38, 63.
 Spencer, R. D., p. 7.
 sphenocephala, Rana, 3, 5.
 Spheroides maculatus, 2, 13, p. 42.
 Spheroides testudineus, p. 50.
 Sphyræna borealis, 3, p. 44.
 Sphyræna barracuda, 6, p. 50.
 Sphyræna guachancho, p. 50.
 Sphyræna picudilla, p. 50.
 Sphyrna zygaena, 2, 13, p. 41.
 spilopterus, Citharichthys, p. 50.
 Spinden, H. J., 2, 4.
 squirella, Hyla, 3, p. 3.
 stansburiana, Uta, p. 10.
 steatogenes elegans, 15.
 Stejneger, L., 6.
 Stenotomus chrysops, 13.
 Stephanolepis hispidus, 13.
 Sternarchella balaenops, 15.
 Sternarchella schottii, 15.
 Sternarchorhamphus macrostoma, 15.
 Sternarchus albifrons, 15.
 Sternarchus bonapartii, 15.
 Sternopygus macrurus, 15.
 Sternotherus odoratus, 4, 12, 16, p. 52.
 Stolephorus argyrophanus, 3.
 Stolephorus brownii, p. 50.
 Stolephorus clupeioides, p. 50.
 Stolephorus mitchilli, 2, p. 44.
 Stone, W., 10.
 Storer, T. I., p. 56.
 Storeria dekayi, 14, 16, 17, p. 6.
 Storeria occipitomaculata, 17, p. 6, 7.
 Street, J. F., 4.
 striatus, Centropomus, 2, 13, p. 42.
 strigatus, Prionotus, 2, 13, p. 45.
 sturio, Acipenser, 2.

- subaequalis, *Corvula*, p. 50.
 sucetta oblongus, *Erimyzon*, 11, p. 51.
 surinamensis, *Anisotremus*, p. 50.
 surinamensis, *Lobotes*, 1.
 suspectum, *Heloderma*, 7.
 Swifts, 13.
 sylvatica, *Rana*, 2, 4, 11, 16, p. 39, 51.
 synagris, *Neomaenis*, p. 50.
 Synodontis schall, 8.
 Synodus dominicensis, p. 50.
 Synodus foetens, 13, p. 44.
 taiaica, *Awaous*, p. 50.
 Tantilla eiseni, 15.
 Tarentola annularis, 8.
 Tarpon atlanticus, p. 59.
 tau, *Opsanus*, p. 60.
 Tautoga onitis, 3.
 temporaria, *Rana*, p. 54.
 Tephrusia, p. 57.
 Terrapene carolina, 3, 4, 11, 12, 16, p. 7, 36, 40, 63.
 testudineus, *Spheroides*, p. 50.
 Testudo polyphemus, 5.
 Testudo serpentina, 1.
 Tetrapterus imperator, p. 59.
 Thamnophis butleri, 15.
 Thamnophis hammondi, 15, p. 10.
 Thamnophis megalops, 12.
 Thamnophis parietalis, 15, p. 10.
 Thamnophis sauritus, 16, 17, p. 40, 63.
 Thamnophis sirtalis, 2, 4, 11, 16, 17, p. 6, 8, 15, 40, 51, 60.
 thebaicus, *Eryx*, 8.
 Thunder, 5.
 tigrinum, *Amblystoma*, 8, p. 30.
 tigrinum californiense, *Amblystoma*, p. 56.
 tigrinus, *Galeocerdo*, p. 43.
 Tilapia nilotica, 8.
 timucu, *Tylosurus*, p. 50.
 torosus, *Diemictylus*, p. 62.
 Trachinotus carolinus, 2, 13, p. 44.
 Trachinotus falcatus, 13, p. 50.
 Trachinotus glaucus, p. 50.
 Trachurops crumenophthalmus, 3, p. 50.
 Travell, W., 4.
 triacanthus, *Poronotus*, 2, 13, p. 41.
 Trichiurus lepturus, 2, p. 50.
 tricornis, *Lactophrys*, p. 50.
 triqueter, *Lactophrys*, p. 50.
 triseriatus, *Pseudacris*, 2, 10.
 tristoechus, *Lepisosteus*, 11.
 trosceli, *Eigenmannia*, 15.
 Turtle, p. 19.
 Tylosurus, p. 13.
 Tylosurus marinus, 2.
 Tylosurus timucu, p. 50.
 typicus, *Rhinodon*, p. 21.
 tyrannus, *Brevoortia*, 2, 3, 13, p. 21, 41, 43.
 Umbrina coroides, p. 50.
 undulatus, *Micropogon*, 2, 13.
 undulatus, *Sceloporus*, 4, 16, p. 6, 9, 40, 63.
 Uromastix ornatus, 8.
 Urophycis chuss, 1, 3, 13, p. 2, 43.
 Urophycis regius, 13, p. 45.
 ustus, *Cryptotomus*, 14.
 Uta stansburiana, p. 10.
 valeriae, *Virginia*, p. 6, 63.
 Varanus griseus, 8.
 Varanus niloticus, 8.
 variegatus, *Cyprinodon*, 2.
 ventralis, *Ophiosaurus*, 11.
 vernalis, *Liopeltis*, 17, p. 52.
 versicolor *Hyla*, 4, p. 5, 39, 53, 55, 63.
 virens, *Pollachius*, p. 45.
 virescens, *Eigenmannia*, 15.
 Virginia valeriae, p. 6, 63.
 virginicus, *Polydactylus*, p. 50.
 viridescens, *Diemictylus*, 2, 10, 13, 14, p. 5, 51.
 viridescens miniatus, *Diemictylus*, 13.
 viridis, *Bufo*, p. 54.
 vittatus, *Ctenops*, 4.
 vivanus, *Neomaenis*, p. 50.
 Vomer setipinnis, p. 44, 50.
 vomer, *Selene*, p. 50.
 vulpes, *Albula*, p. 50, 59.
 Welsh, W. W., 15, p. 3.
 Wiegmann, W. H., 3, 11, p. 45.
 wilderi, *Lampetra*, p. 1.
 wislizenii, *Crotaphytes*, 5.
 Wright, A. H., p. 48.
 xanthurus, *Leiostomus*, 2, p. 44.
 Xiphias gladius, p. 12, 41.
 Zamenis constrictor, 4, 11, 16, 17, p. 6, 40, 45, 63.
 Zamenis constrictor flaviventris, 15.
 Zamenis flagelliformis frenatus, 15.
 Zamenis laterale, 15.
 Zaprora silenus, 12.
 zonatus, *Ophibolus*, 15.
 zygaena, *Sphyrna*, 2, 13, p. 41.